DOCUMENT RESUME

ED 069 141 EM 010 411

AUTHOR	Flugaur, George J.; Schouweiler, Mary P.
TITLE	Clinton Pilot Cassette Center Project Director's Report and Evaluation Addendum 1969-1970.
INSTITUTION	Minneapolis Special School District 1, Minn.
SPONS AGENCY	Minneapolis Public Schools, Minn.
PUB DATE	Mar 71
NOTE	24p.; Research Development Federal Programs
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Aural Learning; Comparative Analysis; *Disadvantaged Youth; *Elementary Education; Federal Programs; Instructional Materials; *Learning Modalities; *Magnetic Tape Cassettes; *Reading; Reading Difficulty; Spelling; Vocabulary
IDENTIFIERS	Elementary Secondary Education Act Title I; Minneapolis, Clinton Pilot Cassette Center

ABSTRACT

The goal of the cassette pilot center at Clinton Elementary School, Minneapolis, Minn., is to develop a tape library that will improve instruction for children who learn better by simultaneous listening and viewing than by reading. To assess effects of the cassette program, two classes at Clinton which received considerable assistance with cassettes were compared with two classes at a nearby school (also Title I) which did not use cassettes. Groups were compared on reading vocabulary and spelling following eight weeks of instruction. Although neither group gained in spelling, the Clinton group made a significant gain in reading vocabulary. Over 90% of the Clinton children gained in vocabulary during the period--which was interrupted by a two-week teacher strike--while only 39% of the control group did. For related documents, see EM 010 403 and EM 010 415. (Author/JK)

ED 069141

Research Development Federal Programs

EM 010 411

Minneapolis Public Schools

Minneapolis Board of Education

Richard F. Allen, Chairman
W. Harry Davis
Lawrence E. Johnson
Frank E. Adams
Florence Lehmann
Davis W. Preus
Stuart W. Rider, Jr.

John B. Davis, Jr., Superintendent of Schools

FILMED FROM BEST AVAILABLE COPY

ED 069141

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

Clinton Pilot Cassette Center
Project Director's Report
and
Evaluation Addendum
1969-1970

A Title I, ESEA Project

George J. Flugaur
Audio Visual Coordinator

and

Mary P. Schouweiler
Resource Curriculum Teacher

Ideas expressed in this report do not necessarily reflect the official position of the Minneapolis Public School Administration nor the Minneapolis School Board

Minneapolis Public Schools
Research Division
Office of Research, Development and
Federal Programs
807 N. E. Broadway
Minneapolis, Minnesota 55413

March 1971

Clinton Pilot Cassette Center
1969-1970

Summary

The goal of the Cassette Pilot Center at Clinton Elementary School is to develop a tape library that will improve instruction for children who learn better by simultaneous listening and viewing than by reading. The project serves primarily the 40% of 376 children at Clinton who achieve at the twenty-fifth percentile or lower on standard achievement tests. See page 6

Cassette materials, both filmstrips and tapes, instruct children in a wide variety of subjects. Teachers and program staff select some commercially produced cassette materials. Teachers, and sometimes students, develop numerous cassette materials of their own for class, small group, and individual listening. Tape recorders are available for overnight use at home by fifth and sixth grade students. See page 7

Twenty-eight teachers were served by the Cassette Center from January 1970 to July 1970. Children in grades K-6 and in two special education classes participated. See page 7

The Cassette Pilot Center was supported from January 1970 to July 1970 with $26,765 from the Elementary and Secondary Education Act, Title I. Staff for the project included an audio-visual coordinator, resource curriculum teacher, and clerk-stenographer. See page 11

To assess effects of the Cassette program, two classes at Clinton, which received considerable assistance with cassettes, were compared with two calsses at a nearby Title I school which did not use cassettes. Groups were compared on reading vocabulary and spelling following eight weeks of instruction. Although neither group improved on spelling, the Clinton group made a significant gain in reading vocabulary. Over 90% of the Clinton children made some gains in vocabulary during this short period-which was interrupted by a two week teacher strike-while only 39% of the children in the comparison school made gains. See page 14

About this report. . . . . .

Evaluation reports prepared by the Research Division of the Minneapolis Public Schools typically follow the procedures and format described in Preparing Evaluation Reports, A Guide for Authors, U. S. Department of Health, Education and Welfare.

Readers who are familiar with these Evaluation Reports may wish to skip the first two sections describing the City of Minneapolis and the Minneapolis Public Schools since these descriptions are standard for all reports.

Contents

	Page
The City of Minneapolis.	1
The Minneapolis Schools	3
The Project School and Its Neighborhood. . . .	5
Historical Background.	6
Objectives	6
Personnel	8
Planning and Training.	9
Project Operations	9
Budget	11
Parent-Community Involvement	13
Dissemination and Communication.	13
Results.	14
Recommendations.	14
Evaluation Addendum.	16

The City of Minneapolis

The program described in this report was conducted in the Minneapolis Public Schools. Minneapolis is a city of 432,000 people[1] located on the Mississippi River in the southeastern part of Minnesota. With its somewhat smaller twin city, St. Paul, it is the center of a seven county metropolitan area of over 1,865,000, the largest population center between Chicago and the Pacific Coast. As such it serves as the funneling point for the entire Upper Midwest region of the country.

The city, and its surrounding area, has long been noted for the high quality of its labor force. Typically, the unemployment rate in Minneapolis is lower than in other major cities, possibly due to the variety and density of industry in the city as well as to the high level capability of its work force. The unemployment rate in May of 1970 was 3.2%, compared with a 5.5% national rate for the same month. As the economic center of a prosperous region, rich in such natural resources as forests, minerals, water power and productive agricultural land, Minneapolis attracts commerce and workers from throughout the Upper Midwest Region. Many residents are drawn from the neighboring states of Iowa, Wisconsin, Nebraska and the Dakotas as well as from the farming areas and the Iron Range region of outstate Minnesota.

More Minneapolitans work in clerical and sales jobs than in any other occupation. Reflecting its position as a major wholesale-retail center and a center for banking, finance and insurance, three out of ten residents work in clerical and sales occupations. Almost as many (27%) are employed as craftsmen, foremen and operatives, and one out of five members of the work force are professionals, technicians, managers, and officials. Fewer than one out of five (17%) workers are employed in laboring and service occupations.

Minneapolis city government is the council-dominated type. Its mayor, elected for a 2 year term, has limited powers. Its elected city council operates by committee, and engages in administrative as well as legislative action.

Minneapolis is not a crowded city. While increasing industrial development has occupied more and more land, population has declined steadily from a peak of 522,000 in 1950. The city limits have not been changed since 1927. Most homes are sturdy, single family dwellings built to withstand severe winters. Row homes are practically non-existent, even in low income areas. In 1960, 53% of the housing in Minneapolis was owner-occupied.

Most Minneapolitans are native born Americans, but about 35,000 (7%) are foreign born. Swedes, Norwegians, Germans, and Canadians comprise most of the foreign born population.

---

[1] 1970 Census estimate

Few non-white citizens live in Minneapolis, although their numbers appear to be increasing. In 1960, only 3 percent of the population was non-white, but it is expected that the 1970 census will reveal that this figure has doubled. About 80% of the non-whites are Black Americans, with most of the remaining non-white population being Indian American, typically Chippewa or Sioux. Only a small number of residents from Spanish-speaking or Oriental origins live in the city. In general, the non-white families are larger than white families. In 1960, non-white residents made up 3.2% of the city's population, but accounted for 7.8% of the children in the city's elementary schools.

Minneapolis has not yet reached the stage of many other large cities in terms of the level of social problems. It has been relatively untouched by racial disorders or by student unrest. Crime rates are below national averages. Mounting concern over law and order, however, is evidenced by the recent election of Mayor Charles Stenvig, a former police detective.

One's first impression is that Minneapolis doesn't really have serious problems of blight and decay. But the signs of trouble are evident to one who looks beyond the parks and lakes and tree-lined streets. As with many other large cities, the problems are focused in the core city and are related to increasing concentrations there of the poor, many of them non-whites, and the elderly. For example, 9 out of 10 Black Americans in Minneapolis live in just one-tenth of the city's area. While Minneapolis contains 13% of the state's population, it supports 28% of the state's AFDC families.

There has been a steady migration to the city by Indian Americans from the reservations and poor whites from the small towns and rural areas of Minnesota. They come to the "promised land" of Minneapolis looking for a job and a better way of life. Some make it, many do not. In 1957, the city supported 1 out of 10 of the state's Indian Americans who were on relief; in 1969 the city supported 3 out of 10. The Indian American population is generally confined to the same small geographic areas as the Black Americans. Estimates of their unemployment rate vary, but range as high as 60%. These same areas of the city have the lowest median incomes in the city, and the highest concentrations of dilapidated housing, welfare cases, and juvenile delinquency.

The elderly are also concentrated in the central city. In 1960, Minneapolis had the greatest percentage (13%) of persons over age 65 among the 30 largest cities in the country. The elderly, like the 18-24 year old young adults, live near the central city because of the availability of less expensive housing in multiple-unit dwellings. Younger families have continued to migrate toward the outer edges of the city and surrounding suburban areas.

These few facts about Minneapolis have been presented to help give you some feeling for the locality in which this program took place. Possibly these names can add additional life to the description: Honeywell, Billy Graham, Minnesota Vikings, Guthrie Theatre, Betty Crocker (General Mills), Minnesota Twins, Pillsbury, University of Minnesota, Minnehaha Falls, Minnesota Symphony, and Hubert Humphrey. These are representative of Minneapolis, the City of Lakes.

The Minneapolis Schools

About 77,000 children go to school in Minneapolis. Most of them, about 68,000, attend one of the city's 97 public schools; 9,000 attend parochial or private schools.

The Minneapolis Public Schools, headed by Dr. John B. Davis, Jr., who became Superintendent in 1967, consist of 68 elementary schools (kindergarten-6th grade), 15 junior high schools (grades 7-9), 9 high schools (grades 10-12), 2 junior-senior high schools, and 4 special schools. Over 3,600 certificated personnel are employed. Control of the public school system ultimately rests with the seven member School Board. These non-salaried officials are elected by popular vote for staggered six year terms. The Superintendent serves as the Board's executive officer and professional adviser, and is selected by the Board.

The system's current operating budget for 1970 is approximately $62,500,000, up from $54,100,000 in 1969 and $48,800,000 in 1968. Per pupil costs were $587.00 in 1969, up from $481.00 in 1968. The range of per pupil costs in the state for 1969 was from $321.00 - $942.00. The median expenditure for school districts in the seven-county metropolitan area was $564.00[2] Close to 40¢ of each local property tax dollar goes for school district levies. The School Board is a separate governmental agency which levies its own taxes and sells its own bonds. Minneapolis also receives federal funds through the Elementary and Secondary Education Act. For the 1968-1969 school year, these funds amounted to approximately $4.3 million dollars.

One of the Superintendent's goals has been to achieve greater communication among the system's schools through decentralization. Consequently, two "pyramids" or groups of geographically related schools have been formed. First to be formed, in 1967, was the North Pyramid, consisting of North High School and the elementary and junior highs which feed into it. In a similar manner, the South-Central Pyramid was formed, in 1969, around South and Central High Schools. There is a director for each pyramid, as well as advisory groups of principals, teachers, and parents. The goals of the pyramid structure are to effect greater communication among schools and between schools and the community, to develop collaborative and cooperative programs, and to share particular facilities and competencies of teachers.

In 1969 there were 20 elementary schools, 5 junior highs, 3 senior highs, and 12 parochial schools serving children in areas eligible for programs funded under Title I of the Elementary and Secondary Education Act (ESEA). The federal criteria for selecting these schools are based on economic factors, in particular the number of families receiving AFDC and/or having incomes under $2,000. Approximately 22,000 children attend

---

[2]Per pupil cost is the adjusted maintenance cost from state and local funds and old federal programs, exclusive of transportation, per pupil unit in average daily attendance for the 1968-69 school year. Source of these figures is Minnesota Education Association Circular 6970-C2, Basic Financial Data of Minnesota Public School Districts, February, 1970.

these schools. Of that number, one-third are defined by the State Department of Education as educationally disadvantaged, i.e. one or more grade levels behind in basic skills such as reading and arithmetic. Federal programs are concentrated on the educationally disadvantaged group.

Based on sight counts, the proportion of Black American pupils for 1969-70 was 8.1%. Five years ago the proportion was 5.4%. Indian American children currently comprise 2.7% of the school population, approximately double the proportion of 5 years ago. The proportion of minority children in the various elementary schools generally reflects the prevailing housing pattern found in each school area. Although some non-white pupils are enrolled in every elementary school, non-white pupils are concentrated in two relatively small areas of the city. Of the 68 elementary schools, 10 have more than 30% non-white enrollment and 4 of these have over 50%. There are no all-black schools nor all-white schools. Thirty-nine elementary schools have non-white enrollments of less than 5%.

The proportion of school age children in AFDC homes has increased from approximately 12% in 1962 to 17% in 1969. In 10 elementary schools, 30% or more of the pupils are from homes participating in AFDC programs.

Turnover rate is the percent of students that come in new to the school or leave the school at some time during the school year (using the September enrollment as a base figure). While the average turnover rate for the city in 1968-1969 was about 60%, this figure varied widely according to location. Target area schools generally experienced a much higher turnover rate; five of these schools had rates of 100% or greater. Eleven Minneapolis schools had turnover rates of 45% or less.

Clinton Pilot Cassette Center

The Project School and Its Neighborhood

The program described in this report was initiated in September, 1969, in Clinton School, one of the 15 elementary schools in the South pyramid. Clinton is located in one of the two "target" areas in the city. Unemployment, divorce, delinquency and neglect cases in the district are common. Many of the families living in this area are transient, moving from one rental home in the target area to another. Much of the housing is substandard, but will probably be improved in the future Model City plans.

Clinton School, built in 1889, with an addition in 1920, includes kindergarten and grades 1 through 6. There are two classes at first, second, and third grade level. There is a fourth and a half-fourth grade, two fifth grades, and a sixth and a half-sixth grade. Two additional fifth grades are bussed in from Mann School. There are also two special classes for the mentally retarded. There is a part-time librarian, speech, gym, shop and music teacher. A Special Learning Disability Resource (SLDR) teacher works with the children on an individual basis.

Total enrollment for the current year is 376. Figures for 1969-1970 indicate a high proportion of Indian (20%), and Black (22%) children at Clinton. (The children bussed in from Mann School increase the percentage of Clinton's black population.) A high pupil turnover rate and a high proportion of AFDC families are found in the school district. Many of the children have medical and dental problems. Teacher turnover is average, but at one time was very high. The immediate trend is that of stability. The community is not cohesive, and there has been little participation in school programs.

Many individual and group efforts are being made to improve the home and school situations of the Clinton School children. These efforts include school sponsored programs such as hot lunches, teacher aides, a youth program (the Youth Educational Support Center-YES), reserve teacher training, and special reading programs. Private groups operating to help the schools include Honeywell, Big Brother and Sister Programs, Women in Service to Education (WISE), and the American Association of University Women (AAUW).

Our Clinton Cassette Project has been enthusiastically received by teachers, parents, and, most importantly, by the children. Teachers have used cassette recorders daily in the classroom. They have used this facility to such a degree that their own cassette prepared lessons require a filing system.

Children have learned to operate the cassettes and headsets quite independently, individually, or in a group. The parents are able to have a direct "pipeline" from the school as cassette tape recorders are brought home by the children. Messages from the teacher, academic lessons,

recreational stories, and blank tapes have all been sent home. The blank tapes are often used by the child to record some of his own reading, prepare a lesson or report, or bring a message back to school from his parents.

Parents reactions have been appreciative and the children have shown their appreciation for the project by their interest and care in the programs and equipment.

Historical Background

The Cassette Pilot Center at Clinton Elementary School funded from September 1969 through July 31, 1970, is an attempt to provide supplemental instruction for target area children who are a year or more below grade level in reading achievement. Their reading disability handicaps them in all subject areas since they cannot cope with most printed materials in science, social studies, etc. Since listening-viewing may be a better mode of learning for these children in the content areas, cassettes are being developed for this purpose.

Tapes have been developed for class, small group, and individual listening. Lessons will be broadcast from the Minneapolis Public Schools for reception and recorded for playback. Cassette tapes have been produced to accompany the many filmstrips now available.

This program did not exist prior to the time period covered by this report. Schools generally have followed the practice of expecting children to adjust to the resources that are provided. Conversely, schools need to adjust their resources according to the children. Listening-viewing may be a better mode for many of these children (at this time) than reading. Children in a target population tend to take on poor self images when repeatedly confronted with tasks beyond their "cope-ability." These children need to see themselves as persons that "can" rather than persons that "can't." The school must arrange the conditions so the children "can" , provide the resources that are more compatible with his current mode, and/or style.

To help gain support and acceptance for the program among pupils, staff, and community, the school system has an experienced central office staff with the "know-how" to support the efforts of those chosen to develop a cassette technology through the development of a pilot center in one of its elementary schools. There was no trouble in gaining acceptance from the various groups.

Objectives

General Objectives

The Cassette Pilot Center at Clinton Elementary School is providing supplemental instruction for target area children who are a year or more

below grade level in reading achievement. Their reading disability handicaps them in all subject areas since they cannot cope with most printed materials in science, social studies, etc. Since listening-viewing may be a better mode of learning for these children in the content areas, cassettes will be developed for this purpose.

Cassette tapes are developed in all subject areas but concentrate on the basic skills. The lessons are paced at a rate to enable the slow learner to succeed. We also feel immediate reinforcement is important in any lesson and especially in a taped lesson. The answer to the first example is given with ample explanation before going on to the second example. The child is often asked to turn off the recorder until he has decided on an answer and then to start the record to hear the correct answer. Our tapes do not emphasize the number correct or the number wrong. We are concerned that at the end of the taped lesson the child has learned the skill taught in the lesson.

The student is invited to change his incorrect answer to a correct answer. We have found that these children take about two minutes to settle down and really listen to the taped lesson. Therefore, we plan our tapes to begin with simple instructions so the child is ready to listen when the skill section of the tape begins. Most of our tapes are open ended. After the taped lesson is finished, the student is directed to do some additional work within his ability range.

The teachers make use of the available materials and also produce their own lessons for group and individual use. The community benefits from these services by direct and indirect messages sent via recorders.

During the project, 28 teachers received services. Grades kindergarten through sixth, plus two special education classes, were involved from Clinton Elementary School. There were 196 males and 173 females, or a sex ratio of 1.13 to 1. Clinton School was selected because 40% of the student population achieved at the twenty-fifth percentile level or lower on the Gates-MacGinitie Reading Comprehension Test. Clinton School population is 22% Black, 21% Indian, 1% Oriental and Spanish surnamed, and 56% Other.

Specific Objectives

- To develop cassette recorders and their cartridge tapes for class, small group (headphone and jackbox), and individual (ear plugs) listening. Such a system could do much to individualize instruction without making it impersonal. Lessons could be:
  1. Broadcast from new FM radio and recorded on cassettes for delayed playback.
  2. Developed to accompany the many filmstrips now available.
  3. Produced by people employed to staff the resource centers.
  4. Produced by teachers at the building level.

- To help children to create their own lesson (interviews, class reports, book reviews).
- To help children learn from lessons presented via cassette recorders in their classroom.
- To allow children to take the playback devices home for "take-home" learning.
- To bring option to the classroom not otherwise possible; children would learn by listening as well as by reading and seeing.

Personnel

A full time Audio-Visual Coordinator, Resource Curriculum Teacher, and Clerk-Steno compose the staff for the project. The resource personnel would implement the program by:

- Serving as cassette materials specialists to teachers and students.
- Selecting commercially made cassette materials for the center and its program.
- Assisting teachers and students to produce cassette materials which supplement those available through other channels.
- Selecting related materials necessary in the operation of the cassette center's program.
- Making all materials easily accessible to students and teachers.
- Working with teachers to utilize cassette materials in curriculum planning.
- Working with teachers to design instructional experiences.
- Teaching the effective use of the cassette recorder and cassette materials.
- Assisting students to develop competency in listening skills.
- Helping students to acquire independence in learning and to gain skill in the techniques of inquiry and critical evaluation.
- Acting as resource persons in the classrooms when requested by the teachers.

Although the entire staff was involved in our decisions, each staff member specialized in a different field. The resource curriculum teacher selected appropriate materials and wrote scripts for tapes which were focussed at the low achievers. The audio-visual coordinator set up a recording studio to organize the circulation procedures for the cassette tapes and recorders. The clerk-steno kept inventory of all equipment including the circulation of tapes, took dictation, transcribed the tape scripts, and performed a variety of office duties.

Planning and Training

The proposal for the development of a cassette technology in the Minneapolis Public Schools was submitted by Mable Melby, Elementary Curriculum Consultant; Joan Williamson, Reading Resource Teacher; Camilla Nelson, Resource Reading Teacher; Helen Stub, Librarian, Southwest High School; Dudley Parson, Audio-Visual Education Consultant; Frank Engdahl, Radio & T.V. Education Consultant; Harold Gregory, Radio & Television Consultant.

The cassette project staff has maintained communications with the personnel involved in planning and writing the proposal as well as all other school personnel who may be of assistance to our program or who may benefit from our services.

Project Operations

A suite of rooms, located near the library, was set aside at Clinton Elementary School to provide space for a cassette laboratory. The cassette laboratory serves the following needs:

1. Office space
2. Consultant Demonstration area
3. Cataloging space
4. Storage space for classroom equipment
5. Recording studio

Major - Instructional Equipment

Laboratory Equipment

1 20 W amplifier
1 mixer, 4 pots
1 microphone with stand
1 audio speaker
1 turntable
1 AM-FM radio cassette recorder
1 reel-to-reel tape recorder

Laboratory Equipment (continued)

2 cassette tape recorders
1 set editing equipment
1 headphone
1 FM aerial with lead in to laboratory area

Library Equipment

Storage racks for cassette tapes
Five drawer catalogue stand
Supplies -- cards, pockets

Classroom Equipment

4 jackbox sets with 4 headphone sets
53 Wollensak 4200 cassette recorders
6 DuKane AV matic projectors
6 carts for DuKane projectors
2 Ektagraphic S.L. projectors
1 Motormatic 35mm camera
1 set steel shelves
1 lockable steel cabinet

Office Equipment

2 library tables
3 desks
8 chairs
3 two-drawer files with locks
1 lockable cabinet
1 typewriter
1 set office supplies and small equipment

Instructional Supplies

Cassette tapes
7" tapes
Take-up reels
Editing supplies

One of our main thrusts is to develop a cassette tape library with cassette tapes and related materials having the same code, catalogues, and organized for efficient circulation through the library.

Some of the main activities of this project are:

- students use of cassette recorders on an individual basis
- teacher aides use of cassette taped lessons to provide quality lessons for the students

- teacher made taped lessons used at listening tables
- teacher made filmstrips accompanied with teacher made cassette tapes.
- students use of cassette recorders to record special reports to be played back to their class.
- students checking out a cassette tape recorder for overnight use.

Students are grouped for various activities by teachers. The teacher-pupil ratio varies from individual instruction by use of the cassette tape recorder and tape lessons to a ratio of 1:4, 1:6, 1:8, or 1:30, which would be a classroom situation. By immediate correction, and consultation with the teacher, the students receive reinforcement and feedback of their individual daily progress.

Budget

Funds for this project were obtained through Title I, ESEA appropriations. The total cost of the project was $26,765. These funds covered a period from January 19, 1970, to July 31, 1970. The audio-visual coordinator was responsible for the expenditures of this program.

The initial or "start-up" costs of the program that will probably not be needed again amount to approximately $7,541.50. These are funds that provided for studio, classroom, and office equipment. Additional funds will be needed to update the facilities and to provide for equipment not foreseen in the original request, however, the financing was adequate to provide for an effective initial thrust.

Approximately 95% of the instructional supplies and related materials become a permanent addition to the cassette tape library. Consumable supplies are a minute segment of our budget.

Total Budget	$ 34,761.00	
Expended January 19, 1970 to June 12, 1970		
Salaries	$ 15,180.00	56.7%
Equipment and Supplies	8,496.35	31.7%
Sub Total	$ 23,676.35	88.4%
Expended Summer Session June 22, 1970 - July 31, 1970		
Salaries	$ 2,390.00	8.9%
Equipment and Supplies	699.46	2.6%
Sub Total	$ 3,089.46	11.5%
Salaries - Total	$ 17,570.00	65.6%
Equipment and Supplies	9,195.81	34.4%
Total Expended Funds	$ 26,765.81	100.0%
Unexpended Funds	$ 7,995.19	

Budget - Details

EXPENDITURES

REGULAR SESSION - January 19, 1970 to June 12, 1970

	Amount
Laboratory Equipment	$ 1,245.85
Classroom Equipment	4,794.82
Library Equipment	573.00
Office Equipment	937.83
Instructional Supplies	954.85
Equipment and Supplies Total	8,496.35
Salaries:	
Audio Visual Coordinator	6,680.00
Curriculum Resource Teacher	6,000.00
Clerk-Steno I	2,500.00
Salaries Total	$ 15,180.00
	8,496.35
TOTAL	$ 23,676.35

SUMMER SESSION - June 22, 1970 to July 31, 1970

Instructional Supplies	$ 699.46
Audio Visual Coordinator	1,134.00
Curriculum Resource Teacher	756.00
Clerk-Steno I	500.00
TOTAL	$ 3,089.46

January 19, 1970 to June 12, 1970	$ 23,676.35
June 22, 1970 to July 31, 1970	3,089.46
TOTAL	$ 26,765.81

Parent - Community Involvement

PTA meetings were used to introduce and aid in implementing the cassette project. Through the use of a slide presentation explaining the varied functions of the cassette project and a display of the equipment to be used, the parents were given an opportunity to become familiar with our project.

Cassette recorder take-home procedures were explained at this time. Parents and other members of the community were welcomed to visit our offices. When the students began to check out cassette recorders for overnight use, the parents and the community became automatically involved in our program. Often parents worked with the child at home while the child operated the recorder. Parents became an aid of the teachers, (teacher lesson is on the tape). Recordings of children made in school were sent home for parents to listen to. Many people from the community and from outside of the community visited our facilities.

Dissemination and Communication

Several bulletins were sent to teacher and aide participants in the Clinton Pilot Cassette Center. These bulletins included instructions on handling and distribution of cassette recorders and tapes. Also, permission slips were sent home for parental approval for take-home use of the recorder and accompanying materials.

A presentation of the proposed program was given at a teachers' meeting and initiated the teacher and resource persons relationship at Clinton. Following this meeting the teachers were present for individual demonstrations in the use of the equipment available.

The project was described to Clinton parents and the school community at two different PTA workshops.

Eleven half-day workshops were conducted for interested teacher groups outside the Clinton community. These groups expressed positive reaction for the establishment of similar projects in their own school.

A slide and tape presentation is available and can be used by any member of the staff. It is so arranged so that it is self-explanatory. It is an excellent instrument for discussion purposes. A question period following the presentation brings the audience into a more active participation, thus increasing their understanding of the project. Several large and small group tours and/or demonstrations have taken place each week in the Clinton Pilot Cassette office and studio. There have been informational visits by central office personnel and other interested parties. We have also answered many phone call requests for information pertaining to curriculum materials and equipment. An article describing the cassette center appeared in the June 1970 issue of the Pyramid Newsletter. It described our operations to date and included several pictures of students participating in the program.

Results

Based on empirical information, we feel the initial thrust of the Clinton Cassette Program has been very successful. The enthusiasm of the teachers has been exemplified by their over-whelming requests for more of the same service. Also, the innovative suggestions that teachers have been feeding to us is proof of their genuine interest in this project.

The students of Clinton School have come to accept our project as a stimulating facet of their school. The students looked forward to using a cassette recorder, individually or with a small group, for reinforcing skills or enrichment activities.

They seemed to be particularly excited about the opportunity to take cassette recorders and tapes home for overnight use. Twelve cassette tape recorders were checked out for overnight use Monday through Friday for two months. All recorders came back in good condition. The students and parents alike seemed surprised at the trust we showed in them by permitting this equipment to be taken home. By means of the take-home cassette recorder, whole families became involved in acitivites at Clinton School. Parent reaction was overwhelming pride in their school. Parents from outside the Clinton community became frequent visitors to Clinton School and the cassette project.

We initiated our use of the cassette with the St. Louis Vocabulary Development Program. Their program had proven that a systematic massive infusion of words over extended time at the middle grade level will produce marked gain in children's verbal achievements as measured by standardized tests.

We wished to try this same approach, but with additional help in the learning process. If a child seemed to make a little gain from pretest to posttest in his tri-weekly lessons, the same lesson was again presented on an individual basis.

The Clinton children showed significant gains from mastery pretest to posttest. We feel the cassette program helped facilitate their gain.

The control group, showed little or no gain in their reading vocabulary increase during the period of time.

Recommendations

As the volume of cassette tapes increases, inevitably there will be a need for additional aid in the library to enhance efficient circulation of books, tapes, equipment, and related materials. Also, there will be a growing need for more efficiently designed storage space for use in Audio-Visual Centers.

Now that the organization and procedures are well established

and we are producing tapes, we are finding the equipment supplied the recording studio is of excellent quality; however, there is a pressing need for soundproofing. A high speed cassette duplicator will soon become a necessity to enable us to provide the services being demanded of our project.

Because of the increasing volume of communications with contacts outside Clinton School, a separate telephone line would greatly increase the efficiency of our project.

Addendum

Clinton Pilot Cassette Evaluation 1969-70

R. W. Faunce, Ph.D.
Assistant Director for Research

Lary Johnson
Research Associate

Minneapolis Public Schools
Research Division
Office of Research, Development and Federal Programs
807 N. E. Broadway
Minneapolis, Minnesota 55413

March 1971

Addendum

Clinton Pilot Cassette
Evaluation
1969-70

An evaluation of the effects of the Clinton Cassette Program was conducted by the Office of Research Development and Federal Programs of the Minneapolis Public Schools at the request of Clinton's principal. Since the cassettes were in use only from January to June 1970, the evaluation does not reflect the efforts of a full year. Evaluation results should be considered exploratory.

Discussions with Clinton staff indicated that the major efforts of the project were to be focussed on vocabulary and spelling during the first project year with some efforts also to be devoted to mathematics. Fourth grade was selected as a grade which would receive considerable assistance from the Cassette Project. The two fourth grade classes at Clinton and two fourth grade classes at a neighboring school were therefore selected for study. The comparison school did not have a cassette project although it did receive Title I, ESEA funds for other purposes.

The fourth grades at Clinton school had a higher percentage of black and Indian children than did the comparison school (40% to 20%). More males (53%) also were found in the Clinton sample than in the comparison sample (44%). Forty-five students at Clinton and 46 students at the comparison school were included in the study.

Test scores obtained from the city wide testing program in January 1970 showed that about 70% of the Clinton fourth graders were one or more years below grade level in Reading Comprehension, as measured by the Gates-MacGinitie Reading Test (form D2M). Since some of the children who were not below grade level in reading comprehension were below grade level in other aspects of reading - or in mathematics - it appears reasonable to assume that virtually all students in these fourth grade classes were "educationally disadvantaged" as defined by federal criteria.

In the comparison school, 51% of all fourth graders (including the two classes sampled) were one or more years below grade level on the Reading Comprehension test. In brief, Clinton students were obviously suited for compensatory programs and appeared to be somewhat more educationally disadvantaged than students in their neighboring school.

Two measures were used in a simple pretest, posttest design to evaluate progress in vocabulary and spelling. Vocabulary achievement was evaluated using a 45-item test developed by St. Louis Public Schools, while spelling was measured using the items from grades 3-6 of the Iowa Tests of Basic Skills (Form 4). Tests were administered by the classroom teachers at Clinton and the comparison school.

Results showed statistically significant gains in vocabulary for Clinton students, but no gain in spelling. No gains were noted in either subject for

the fourth grade students at the comparison school. See Table 1.

Table 1

Vocabulary and Spelling Tests Mean Raw Scores for Clinton and Comparison School Children

	Clinton			Comparison		
	Mean	SD	t	Mean	SD	t
Vocabulary						
Pretest	23.7	10.7	7.64**	26.2	10.5	n.s
Posttest	33.4	9.4		25.5	12.3	
Gain Score	9.7			-0.7		
Spelling						
Pretest	22.0	8.4	n.s.	24.8	8.4	n.s.
Posttest	22.4	8.6		24.0	9.7	
Gain Score	0.4			-0.8		

**Significant at .01 level
n.s.=Not significant, $p > .05$

Neither sex nor race were related to the gains in vocabulary scores at Clinton. Black, white, and Indian children did equally well. Gains made by boys and girls were similar.

Over 90% of the Clinton children made some gain in vocabulary while 39% of the comparison children recorded gains.

Were these vocabulary gains a result of the Cassette project? Why weren't similar gains made in spelling? Let's explore these questions.

The vocabulary test was based on a mastery test developed in the St. Louis Public Schools for use with the Cassette project. In a sense then, the educational program was "teaching to the test." The standardized test of spelling was not directly related to program content. Possibly the brief period of exposure was insufficient to effect measurable gains.

Emphasis should be given to the conditions under which the project was evaluated. The pretest-posttest span covered only ten weeks. Two of these ten weeks were not available for instruction due to a teacher strike. Thus, this first year project really covered only eight weeks of instruction and the posttests were given shortly after a two week absence from school. These factors may explain the lack of measurable achievement in spelling at Clinton school and in spelling and vocabulary at the neighboring school.

The gains in vocabulary at Clinton over a relatively short time and the staff reaction to the Cassette project, make the project worthy of further exploration.